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PENSOFT

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The discovery and naming of the Sumatran Rhinoceros (*Dicerorhinus sumatrensis*) after 1793, with details of the *Rhinoceros Sumatricus* of Bertuch (1805) and Wilhelm (1808)

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Abstract

There was a considerable gap of 21 years between the illustrated description of a specimen of the Sumatran Rhinoceros (*Dicerorhinus sumatrensis*) by William Bell in 1793 and the proposal to accept it as a named new species by Gotthelf Fischer in 1814. In the meantime some 17 authors reported the possibility that the animal should be regarded as a new species. Hitherto overlooked, the German writer Friedrich Justin Bertuch used a new name in the caption to a reproduction of Bell's plate, as *Rhinoceros bicornis Sumatricus*. This was published in 1805 in a second edition of his "Bilderbuch für Kinder", a serial magazine aimed at young people. This work has an extremely complex bibliography through many re-issues and translations, which is only partly resolved. The same name in the combination *Rhinoceros Sumatricus* was included by Gottlieb Tobias Wilhelm in a companion to the "Bilderbuch" available in 1808. The complicated circumstances of Bertuch's proposal in 1805 and his unusual usage of a trinomen lead to the suggestion that his book might not be consistently binominal, making the name unavailable. The naming by Wilhelm in 1808 is straightforward and correct, hence *Rhinoceros sumatricus* Wilhelm, 1808 is an available name and a senior objective synonym of *Rhinoceros sumatrensis* G. Fischer, 1814. The International Code of Zoological Nomenclature allows the suggestion that Wilhelm's name was a *nomen oblitum* (forgotten name). The various plates of the rhinoceros found in the "Bilderbuch" by Bertuch and the "Unterhaltungen aus der Naturgeschichte" are figured and explained.

Key Words

Zoological nomenclature, Nomen oblitum, Juvenile literature

Introduction

In 1793 William Bell sent a detailed description of a male Sumatran Rhinoceros (*Dicerorhinus sumatrensis*) to London, where it was published in the "Philosophical Transactions of the Royal Society of London" with three plates (Bell 1793a). On this basis, the species received the scientific name "*Rhinoceros sumatrensis*" in an overview of the Animal Kingdom by Gotthelf Fischer in 1814. This was soon followed by the independent naming, again as *R. sumatrensis*, by Georges Cuvier in 1816. For over a century the name was credited to Cuvier while the book of Fischer lay forgotten (Rookmaaker 2024: 650–652).

Bell's paper was well written and it was illustrated. The Sumatran Rhinoceros with a double horn and smooth hairy skin in our current understanding is clearly different from the other two living species of rhinoceros in Asia with one horn and an armour-plated skin, as well as from the species in Africa, which are larger in size and with longer horns. Yet it took the scientific community at the start of the 19th century 21 years to decide that the animals were different enough to justify separate names. This time lapse is remarkable, but has received no attention from later taxonomists.

It is here noticed for the first time that there was another name which predates both proposals of *R. sumatrensis*.

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This is found in a periodical or book series aimed at children's entertainment and education written in Germany in the first decade of the 19th century.

Zoological nomenclature is governed by a "Code" which through a series of editions and translations has continued to depend on the Principle of Priority, where the earliest name has to be used for any given taxon. This principle was first formalized in 1842 by the British geologist and ornithologist Hugh Edwin Strickland (1811–1853), when he proposed to use the 12th edition of the "Systema Naturae" (1766) by Carl Linnaeus as the starting point, later amended to the 10th edition of 1758 as implemented today (Rookmaaker 2010, 2011).

Although the principle seems simple, in practice it isn't always easy to implement, because names were proposed and published in a wide range of publications, of which many were not necessarily in the mainstream of science. In my continuing search of all literature on the rhinoceros, I have recently found and documented names in forgotten publications, as the *Rhinoceros rugosus* Blumenbach, 1779 and *Rhinoceros borili* Blyth, 1870 (Rookmaaker 2004, 2022). While it is understandably preferable to marginalise these minute discoveries rather than implement them, it is in a way unfair to authors who have actually tried to further science by publishing their potential discoveries. History is as democratic as taxonomy, and there is still much to learn from the expertise of our ancestors. The re-discovered name *Rhinoceros sumatricus* documented in this paper is of course not going to be allowed to upset the current stability of rhinoceros nomenclature, rightly so, and the discussion will look at the best procedure to deal with these recurring inconveniences.

The recognition of the Sumatran Rhinoceros following Bell's description

William Bell (1759–1792) had received training as a zoological amanuensis and draughtsman by the famous surgeon and collector John Hunter (1728–1793) in London. He went to Fort Marlborough on the west coast of Sumatra to serve the garrison as medical doctor (Rookmaaker 2024: 650). Arriving in early 1792, he died of putrid fever on 3 July 1792. He had the chance to examine a male rhinoceros shot about 16 km from the Fort, and later a young female. The first animal was a male, which had two horns on the nose, measured 256 cm long and 132 cm high, showed six cheekteeth and two front teeth. Bell sent his morphological description to London, together with drawings showing a side-view of the rhinoceros, a skull, and the two jaws. His shipment was received in September 1792 in London by Joseph Banks (1743–1820), the President of the Royal Society. Banks read the paper on 3 January 1793 in the Society's meeting, and the description was available in print soon afterwards (Bell 1793a). The three plates engraved by James Basire (1769–1835) after his drawings were carefully executed and informative (Figs 1–3). Extracts were soon inserted in periodicals both in London (Bell 1793b) and in Paris (Bell 1795). Neither Bell nor the editors of the "Transactions" claimed that the rhinoceros of Sumatra was a hitherto unknown type nor did they insert a binominal name.

Being published in such a prestigious and widely distributed journal, scientists of course immediately started to compare this rhinoceros of Sumatra with other known species. At the time, only two were usually recognized, one with a single horn, the other with a double horn, but really there was continued uncertainty of their distribution and about the significance of the number of horns. When Bell's plate of the side-view is compared to that drawn by the Swedish explorer Anders Sparrman (1748–1820) in South Africa (Fig. 4), the differences are relatively minor, as there are few folds in the smooth skin, although significantly Sparrman's rhino skull did not show the front teeth documented by Bell (Sparrman 1778; 1783, pl. V). However, contemporary commentators in Germany used for their comparison the plate in the German translation of Sparrman's travels edited by Georg Forster (1754–1794), where significantly another depiction of the African Rhinoceros was inserted (Fig. 5). The editor of the German translation (Sparrman 1784, pl. IX) used the drawing made by Robert Jacob Gordon (1743–1795) in South Africa in 1778, copied from the plate in various editions of the "Histoire Naturelle" by Buffon from 1781 onwards (Rookmaaker 1985; 1989: 135–147; 1992).

Studying the reception of Bell's Rhinoceros of Sumatra in the period 1793 to 1817, I have found the following instances where Bell's description received comments in print:

1. Étienne Geoffroy St. Hilaire & Georges Cuvier (1795). They suggest that it is a new species due to the presence of incisors.
2. Jonas Dryander (1796: 66). It is a "nova species".
3. Johann Reinhold Forster in François Levaillant (1796, p. 122n). Maybe this is a third species of rhinoceros.
4. "Encyclopaedia Perthensis" (Anon. 1796) reproduces the side-view as plate CCXCVI, with name "Rhinoceros Bicornis."
5. Georges Cuvier (1797). In this lecture, he states that rhino species can only be distinguished by the dention. He does not mention the Sumatran Rhinoceros.
6. "Encyclopaedia Brittannica" (Smellie 1797). Bell's plate of the side-view is copied as Pl. CCCCXXXVIII with the name "Rhinoceros Bicornis": "we are disposed to think them varieties."
7. Matthäus Bechstein in Thomas Pennant (1798: 145n). Following Forster, this is probably a third species.
8. Charles-Nicolas-Sigisbert Sonnini in Georges Louis Leclerc, Comte de Buffon (1800: 347). He mentions Bell's description, without a name.

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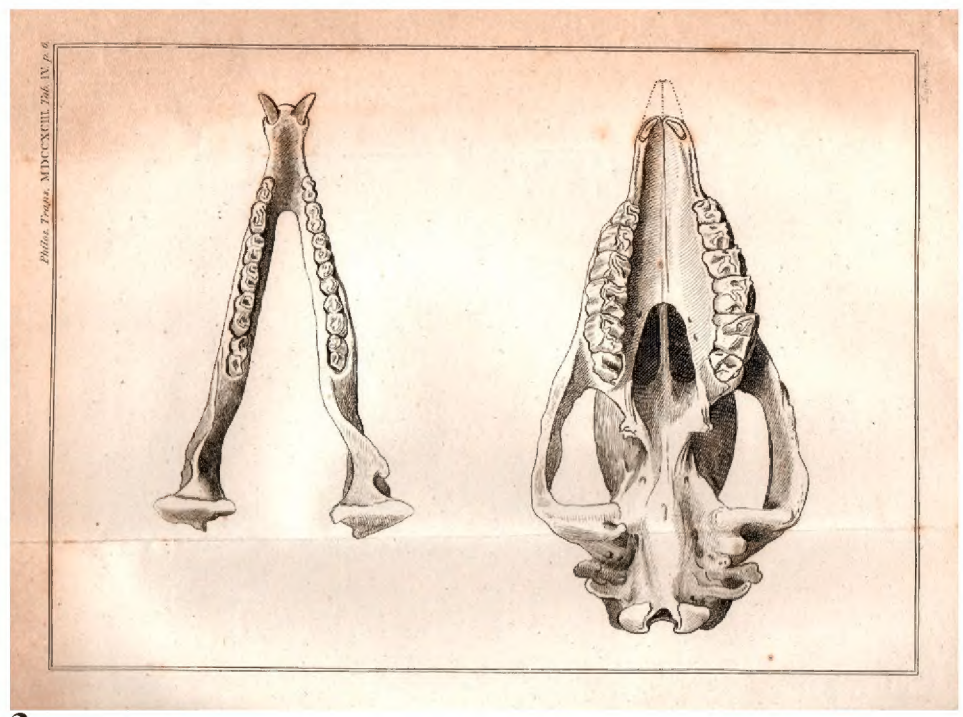

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Figures 1–3. 1. Lateral view of the male Sumatran Rhinoceros described and drawn by William Bell (1759–1792), found near Fort Marlborough in eastern Sumatra. This represents the type-specimen of *Rhinoceros sumatrensis* G. Fischer, 1814. From William Bell, Philosophical Transactions of the Royal Society of London, 1793, pl. 2. Courtesy: Tineke van Strien. **2.** The skull of the Sumatran Rhinoceros drawn by William Bell in 1792. From William Bell, Philosophical Transactions of the Royal Society of London, 1793, pl. 3. Courtesy: Tineke van Strien. **3.** The upper and lower jaws of the Sumatran Rhinoceros. From William Bell, Philosophical Transactions of the Royal Society of London, 1793, pl. 4. Courtesy: Tineke van Strien.

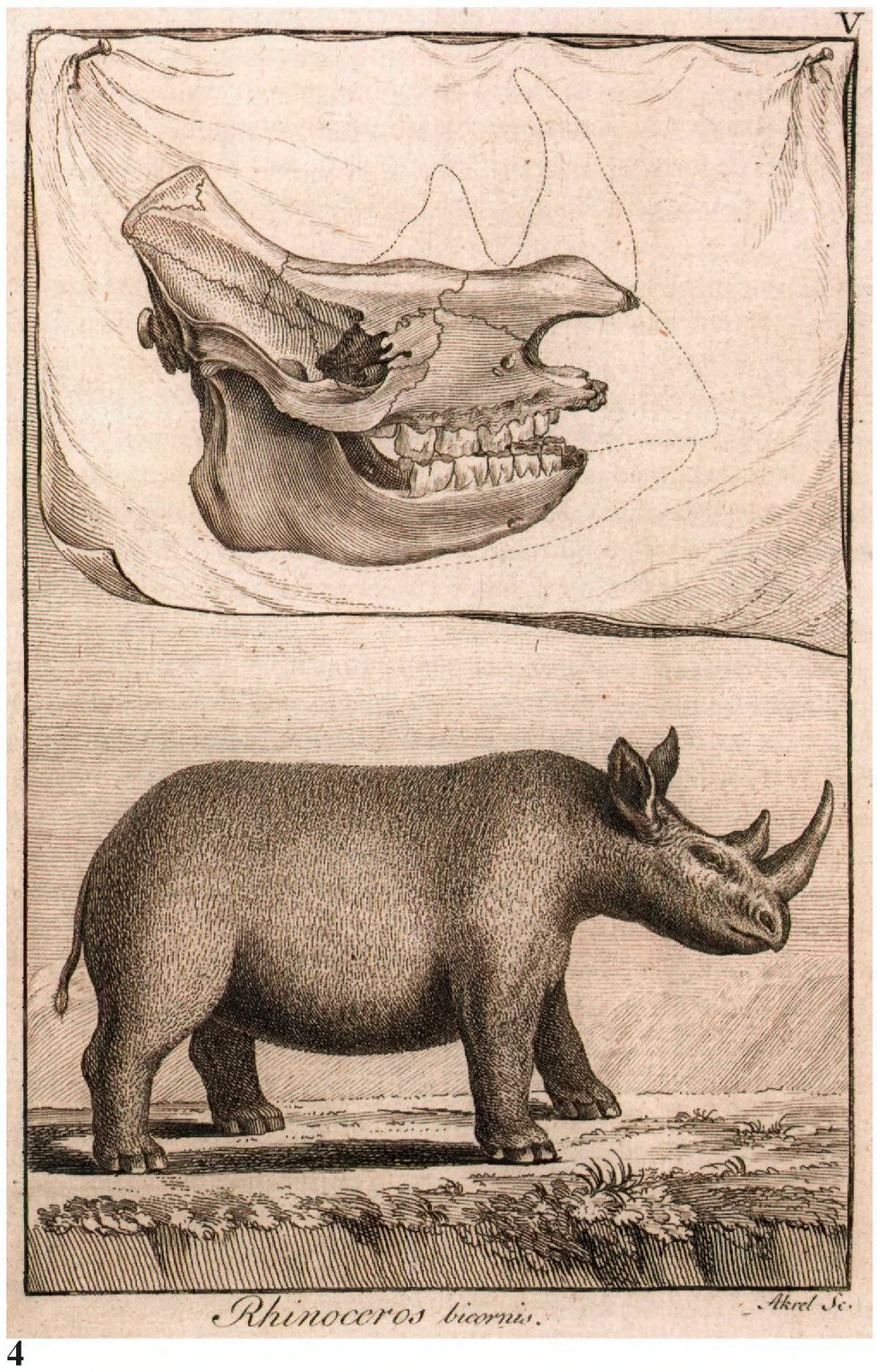
9. George Shaw (1800: 207–210). He repeats Bell's text and copies the plate of the side-view (plate 62, facing p. 206). He feels that there is little doubt that there are three different species of rhinoceros, calling Bell's animal the "Sumatran double-horned Rhinoceros."

10. Barthélemy Faujas St. Fond (1803). He copies part of Bell's description in a French translation and reproduces the drawing of the skull (plate X fig. 3). First (p. 205), he considers that it is a new species, but then (p. 206) suggests it might be a hybrid between an Indian and an African rhino.

11. Charles Taylor in Augustin Calmet (1803). His plate 2 shows the head of the double-horned rhinoceros copied from Bell's account.
12. Bertuch (1805a): see below
13. Karl Philipp Funke (1805: 4). The rhinoceros of Sumatra could be a "Spielart" (variety) of the one-horned rhinoceros. See below.
14. Georges Cuvier (1806). He copies the figure of the skull (pl.3 fig. 8) and concludes that Bell's rhino seems to be a third species. There are no binominal names in this paper.
15. Wilhelm 1808: see below
16. "The Natural History of Quadrupeds" (1811: 118–120). The anonymous author copies part of Bell's description as "Sumatran Rhinoceros."
17. Georges Cuvier (1812, vol. 2: 11). The rhino described by Bell appears a separate species.
18. Gotthelf Fischer, known in zoological literature also as G. Fischer de Waldheim or G. Fischer von Waldheim (1814, vol. 3, p. 301). Accepts a separate species named here for the first time *Rhinoceros sumatrensis*.
19. Georges Cuvier (1817 [available in 1816], vol. 1, p. 240). The animal described by Bell is named *Rhinoceros sumatrensis*.
20. Henri Marie Ducrotay de Blainville (1817: 167). He includes the "Rhinocéros de Sumatra" as a third species.

After the naming by Georges Cuvier in 1816, Bell's plate showing the lateral view was again copied by August Goldfuss (1826, pl. 35) as "Rhinoceros sumatrensis" and by Jean-Charles Chenu (1858, Supplement pl. 14 fig. 1) as "Rhinocéros bicorne de Sumatra."

There were of course authors who just ignored the description by Bell. The naturalists listed here mostly agreed that the Sumatran Rhinoceros deserved a special place. Why did it take so long for this virtual consensus to be translated into a proposal of a new name? All the authors above could easily have taken that step, yet they refrained. It shows that the Linnaean system of nomenclature had not yet taken hold of the sciences as it has now, and many workers, especially in France with the tradition of Buffon, were happy to stick to the vernacular



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Figures 4, 5. 4. The African "Rhinoceros bicornis" drawn by Anders Sparrman, found in his "Resa" (1783, pl. V). Note the general smoothness of the skin. **5.** "Rhinoceros bicornis, Afrikanisches Nasehorn", from Sparrman's "Reise" (1784, pl. IX). The drawing of the skull was copied from the original Swedish edition of the "Resa" of Anders Sparrman (see Fig. 4), but the side-view was based on the animal drawn by Robert Jacob Gordon in South Africa found in later editions of Buffon's work from 1781.

names (Rookmaaker 2005). This probably changed, especially in France when Cuvier embraced the system in his "Règne Animal" published in 1816.

The plates of the Rhinoceros in Bertuch's Bilderbuch

Friedrich (Johann) Justin Bertuch (1747–1822) was a writer, entrepeneur and publisher in the German city of Weimar (Hohenstein 1989). Following the success of the periodicals "Allgemeine Literatur-Zeitung" and "Journal des Luxus und der Moden", he decided to edit an illustrated monthly magazine aimed to educate and entertain children and young people, known as the "Bilderbuch für Kinder" in German, or "Porte-Feuille des Enfans" in French (full title in bibliography). Each issue contained five plates with explanatory text on miscellaneous subjects including animals, flowers, fruits, gods, landscapes, buildings. The plates were executed by the students of the Kupferstecherschule (School for Engraving) in Weimar under supervision of Johann Heinrich Lips (1758–1817) and Georg Melchior Kraus (1737–1806). Published between 1790 (or 1792) and 1830, the "Bilderbuch" appeared in different formats, with plates either coloured or uncoloured, in 1 or 2 or 3 or 4 languages, first in Weimar, with offshoots or pirated versions elsewhere. There were 237 parts combined into 12 volumes with a total of 1187 copper-engravings. Given the apparent popularity of these children's books, the absence of a full bibliography is surprising, although too few complete sets have survived to do justice to the diversity (Strobach 1969; Wegehaupt 1979: 28). Owners had to bind their own copies and could do this according to subject or following the dates of publication. I must admit that even just looking at a few rhino plates, the bibliographic complexity is baffling. Besides the "Bilderbuch für Kinder", the same or similar plates and descriptive texts are found in the "Neues Bilderbuch für Kinder und deren Erzieher", the "Bilderbuch zum Nutzen und Vergnügen der Jugend", and even the "Naturgeschichtliche Belustigungen". Besides the original Weimar edition, others appeared in Vienna (Anton Pichler), Rumburg, Leipzig, Paris and Prague. My survey, using mainly online digital platforms has not led to a satisfactory unravelling of all possibilities, but hopefully the main sequence has emerged correctly.

There were three plates showing a rhinoceros. The animals were named in the text but not on the plates, probably because the magazines appeared in a variety of languages. The plates in the "Bilderbuch" are found in multiple editions with different dates and publishers. They were all accompanied by a short description written by Bertuch, or under his supervision. The plates are here listed as nos. A, B and C.

A. Volume 1, Part (Heft) 1. Plate: "Vierf.[üssigen] Thiere II; Quadruped. II." This shows a one-horned rhinoceros together with five other animals. First published in Weimar in 1790, again in 1792 (Fig. 7).

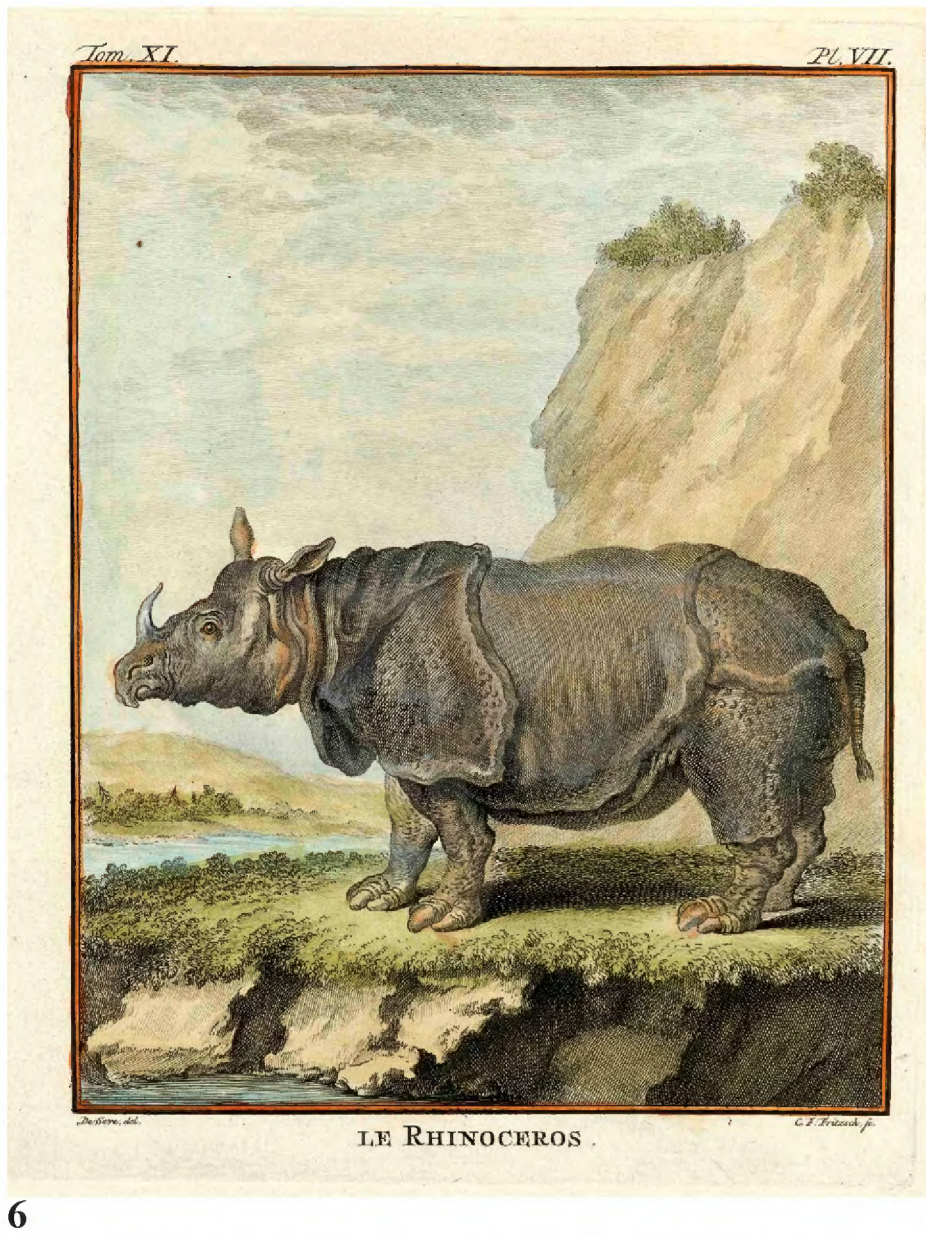
B. Volume 5, Part (Heft) 1. Plate: "Vierf.[üssigen] Thiere LXIX; Quadrupèdes LXIX; Quadrupeds LXIX; Quadrupedi LXIX." There are two figures showing the African black and the Sumatran double-horned rhinos (Fig. 8; see also Fig. 9). First published in Weimar in 1805(a).

C. New edition, volume 9, Part 20. Plate: Verm.[ischte] Gegenstaende CCXXVI; Melanges CCXXVI." This shows "Der Kampf des Rhinoceros mit dem Elephanten", a single-horned rhinoceros battling a group of six elephants. First published in Weimar in 1816 (Fig. 10).

The first plate A (Vierfüssigen Thiere II) depicted two zebras, a porcupine and a babirusa, together with a rhinoceros on top, facing right and drawn following the depiction in Buffon's "Histoire Naturelle". The plate is not signed. The original engraving in Buffon (1764, vol. 11, pl.7) was copied by the artist Jacques De Sève (d. 1788) after the work of Jean-Baptiste Oudry (1686–1755), who drew the animal known as Clara or the Dutch Rhinoceros when she was exhibited in Paris in 1749 (Fig. 6). Bertuch's use of this figure shows how persistent a single representation could be, and in fact Buffon's plate continued to be copied well into the 19th century. This first issue of the "Bilderbuch" remained undated, but was probably available in 1790 as suggested by Bertuch (1811: iii) himself. In the text (Bertuch 1790) the animal is called "(No. 1) Das Rhinoceros, oder Naßhorn." In a new (second) edition of volume 1 dated Weimar 1801 (Bertuch 1801), the animal received a scientific name: "(No. 1) Das Rhinoceros oder Nashorn. (Rhinoceros Unicornis.)."

The second plate B (Vierfüssigen Thiere LXIX) has two figures. The upper figure shows the African black rhinoceros, following the example of the German edition of the travels of Anders Sparrman of 1784, while the lower figure is the Sumatran Rhino from William Bell. This plate and the explanatory text was first published in volume 5 dated 1805 (Bertuch 1805a). These two species are called "Fig. 1. Das Afrikanische Nashorn (Rhinoceros Africanus)" and "Fig. 2. Das Nashorn von Sumatra (Rhinoceros bicornis Sumatricus)." *Rhinoceros africanus* is a junior synonym of *Diceros bicornis*, the name currently used for the black rhinoceros. Bertuch's new name *Rhinoceros bicornis Sumatricus* for the Sumatran Rhino is found here for the first time and is discussed below. The plate is not signed in the Weimar edition of the "Bilderbuch", but the signature of Jacob Xavier Schmuzer appears in an edition produced by Anton Pichler (1770–1823) in Vienna, also dated 1805(b) (Fig. 9). However, this is hard to explain as Schmuzer lived from 1713 to 1775. Further research might unravel this anomaly.

The third plate C (Vermischte Gegenstaende CCXXVI) of 1816 is a scene of a rhinoceros-elephant fight copied from the "Oriental Field Sports" by Thomas George Williamson (1759–1816) with plates by Samuel Howitt (1756–1822) and first published in 1807 (Williamson 1807, pl. IX; see Rookmaaker 2024: 340–343).



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Figures 6, 7. 6. The original plate of the greater one-horned rhinoceros seen in Paris in 1749, published in Buffon's "Histoire Naturelle" (vol. 11, pl. 7) in 1764. **7.** Quadrupeds Plate II, published by Friedrich Justin Bertuch in his "Bilderbuch für Kinder", first edition of Weimar available in 1790 or 1792. The one-horned rhinoceros is modelled after the example of Buffon's "Histoire Naturelle" of 1764 (see Fig. 6). The male and female zebras in the middle are actually a Cape mountain zebra after Buffon, and a Quagga after a plate by George Edwards of 1758.

The list of mammals by Karl P. Funke in 1805

A companion work to the "Bilderbuch" was contributed by Karl Philipp Funke (1752–1807), a classical philologist and high school teacher working in Dessau, Germany. He called the single-horned animal of plate II "Nashorn" (Rhinoceros), without a binominal name, although he used these for many other species (Funke 1798: 34). The two double-horned rhinos of plate LXIX were found in his 9th volume of 1805, where he called them: "(Fig. 1) Afrikanische Nashorn, Rh. Africanus", and "(Fig. 2) Das Nashorn von Sumatra." He was uncertain about the specific status of the latter, because there were both differences and similarities compared to the Asian one-horned animal, hence it could well be a "Spielart" (variety) of that species (Funke 1805: 4–8).

The "Rhinoceros bicornis Sumatricus" of Bertuch from 1805

The Sumatran Rhinoceros was depicted for the first time in volume 9 of the "Bilderbuch", which appeared in Weimar in 1805. The figure on Plate LXIX is clearly modelled after the example of William Bell of 1793. The text in the same part of the book explains as follows (from the English version of Weimar, vol. 5, 1805a):

> "Fig. 2. The Sumatra-Rhinoceros. (Rhinoceros bicornis Sumatricus.)
>
> The Sumatran double-horned Rhinoceros is the third of the different species of Rhinoceros. It differs from the two others in the situation of its horns, the larger being placed immediately above the nose and the small one, which is but four inches long, standing in the same line above the eyes.
>
> The skin is rough but no more than a third or a quarter of an inch in thickness, and of a brownish ash-colour. The Shape is much like that of a hog. This species has as yet only been met with in the isle of Sumatra. In size it is much inferior to the African two-horned Rhinoceros."

This is almost certainly the first time that the name *Sumatricus* appeared in print, and it continued to be included in later editions of the work. The author of this text, as stated on the title-page, was Friedrich Justin Bertuch. The date 1805 appears to be the earliest of the different editions that could be consulted. The description of the species is correct and shows that the animal sent from Sumatra by William Bell was the type specimen in modern terms.

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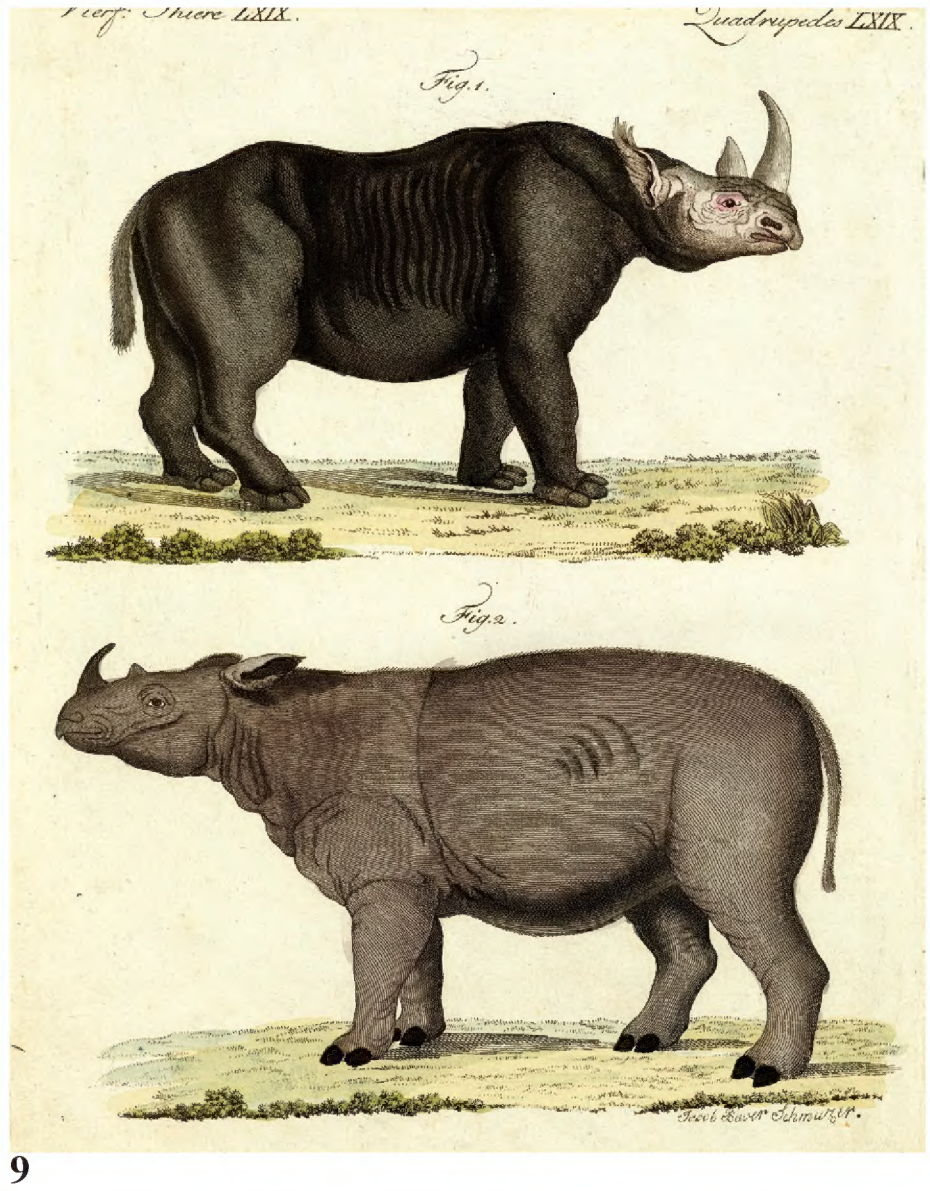

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Figures 8, 9. 8. Quadrupeds Plate LXIX, from the "Bilderbuch für Kinder" by F. J. Bertuch, first found in volume 5, published in Weimar in 1805. The plate shows (above) the two-horned rhinoceros from Africa and (below) the two-horned rhinoceros from Sumatra. These were based on plates in the German edition of the "Reise" by Anders Sparrman (see Fig. 5) and on the plate in the description by William Bell (see Fig. 1). **9.** Quadrupeds Plate LXIX, from the Vienna (Anton Pichler) edition of the "Bilderbuch für Kinder" by F. J. Bertuch, also dated 1805. It is similar to Figure 8, but adds (lower right) the signature of the engraver Jacob Xavier Schmuzer.

Figure 10. Vermischte Gegenstände Plate CCXXVI, from the 1816 issue of the "Bilderbuch für Kinder" by F. J. Bertuch. This scene was copied from the "Oriental Field Sports" by Thomas Williamson of 1807.

The recognition of *Rhinoceros Sumatricus* by Gottlieb T. Wilhelm

Gottlieb Tobias Wilhelm (1758–1811) was a preacher and popular writer based in Augsburg, Germany. His "Unterhaltungen aus der Naturgeschichte" (Discourses on Natural History), published from 1792 onwards in weekly installments, reached 19 volumes when he died. There were several parallels in selection of figures and content between his work and that of Bertuch, although on the face of it their intended audience was different.

The illustrated description of the rhinoceros appeared in the first edition of the "Unterhaltungen" dated 1792. The text listed two species, the "*Asiatische*" (Asian) and the "*Africanische*" (African), without the addition of binominal names (Wilhelm 1792: 230–240). These were shown on plate XXIX, the upper figure of the Asian rhino copied from Buffon, the lower figure of the African rhino copied from Ridinger (1768). The latter plate was part of the legacy of Johann Elias Ridinger (1698–1767), issued by his sons in a very rare illustrated work, where a drawing of a recumbent rhinoceros modelled after the animal seen in Augsburg in 1748 was embellished with a posterior horn, possibly to illustrate an African species (Fig. 11).

This was expanded in the second revised edition of 1808. Wilhelm (1808: 475–493) now included three species: the "*Asiatische"* (Asian) *Rhinoceros unicornis*, the "*Africanische"* (African) *Rhinoceros Africanus*, and the "*Sumatraische"* (Sumatran) *Rhinoceros Sumatricus.* Wilhelm characterized the third species as follows (1808: 491–492), where the number "138" refers to his sequence:

"Auch das Nashorn von Sumatra (Rh. Sumatricus, "le Rhin. de Sumatra" 138) scheint eine eigne Art zu seyn. Denn seine zwey Hörner sind in der Form und in der Lage von der vorigen verschieden, in der Gestalt kommt übrigens das Thier mit dem asiatischen überein. Das größere ist sehr spitzig und zurückgebogen und sitzt über der Nase; das kleinere hat eine pyramidalische Form und seine Stelle über den Augen. Beyde schienen dem, der dieses Nashorn zuerst beobachtet hat, William Bell, am Hirnschedel [492] befestigt und keiner Bewegung fähig zu seyn. Auch dieses Nashorn hat nicht so weite Hautfalten, wie das asiatische. Nur an der Brust ist die Haut sehr weit. Die Farbe derselben ist bräunlich aschgrau, der Bauch fleischfarbig. Noch ist aber dieses Thier viel zu wenig beobachtet, um eine vollständige Beschreibung davon zu geben."[1]

The first two species were depicted on plate XLVIII, the one-horned rhinoceros after an engraving by Johann Elias Ridinger, and the double-horned rhinoceros again after Sparrman (Fig. 12). The Sumatran Rhinoceros is shown on plate XLIX with a figure designed after the original by William Bell, together with the tusked (imaginary) Sukotyro of Johan Nieuhof (Fig. 13).

The third edition of Wilhelm (1809) was practically identical to the one in the previous year, with the same page and plate numbers, except that there are minor differences in the placement of the figure numbers on the plate.

Discussion

In 1805, Friedrich Justin Bertuch named Bell's Sumatran Rhinoceros as "Rhinoceros bicornis Sumatricus." This is the first time that *Sumatricus* appears in print. This notation of a genus name, followed by two specific names, has become common practice in zoological nomenclature to indicate a subspecies. However, while there were no objections to this, the usage only became usual among mammalogists towards the end of the 19th century and was rare earlier in the century. For a name to be available, it must have been first described in a work that was "consistently binominal" (ICZN 1999, article 11.4). Given the complexity of Bertuch's works, it is presently impossible to be certain that this was in fact the case. Added to this is the uncertainty about the first date of publication, as alternatives might exist. Therefore, it is my suggestion that it is safer not to accept Bertuch's naming and to propose that the name *Sumatricus* of Bertuch, 1805 is unavailable for purposes of nomenclature, hence does not enter into synonymy.

The argument differs in case of the "Unterhaltungen" by Gottlieb Tobias Wilhelm. Here the description of *Rhinoceros Sumatricus* as a binomen is correctly structured with all necessary elements. The type specimen is the animal examined by William Bell in Sumatra. *Rhinoceros sumatricus* Wilhelm, 1808 is a valid name in zoological nomenclature, and hence a senior objective synonym of *Rhinoceros sumatrensis* G. Fischer, 1814.

It does not need further explanation that Wilhelm's *Rhinoceros sumatricus* has been forgotten. It has never been used in the literature outside the books by Bertuch and Wilhelm. The name was unknown to Sherborn (1922) when he compiled the masterful "Index Animalium". Hence it is a *nomen oblitum* in the sense of the Code (ICZN 1999, article 23.9.2) and should not be used in favour of the junior usual name *Rhinoceros sumatrensis*, currently in the combination *Dicerorhinus sumatrensis* (G. Fischer, 1814).

The discovery of unknown names in usually old and obscure books is rather frowned upon by working

1 German text by Wilhelm (1808: 491–492) translated into English: The rhinoceros of Sumatra (Rh. Sumatricus, le Rhin. de Sumatra 138) also seems to be a separate species. For its two horns are different from the previous one in shape and position; in their shape the animal is similar to the Asian one. The larger horn is very pointed and recurved and sits above the nose; the smaller one has a pyramidal shape and its location is above the eyes. Both appeared to the person who first observed this rhinoceros, William Bell, to be attached to the skull [492] and unable to move. This rhinoceros also does not have as wide skin folds as the Asian one. The skin is only very loose on the chest. The color is brownish ash-gray, the belly is flesh-colored. However, this animal has not yet been observed often enough to give a complete description of it.

11

12

13

Figures 11–13. 11. Plate accompanying the text by Gottlieb Tobias Wilhelm in the first edition of the "Unterhaltungen aus der Naturgeschichte" (1792, pl. XXIX). The upper figure is the one-horned rhinoceros copied from Buffon (see Fig. 6), and the lower figure is the African double-horned rhinoceros copied (in reverse) from the "Geschilderte Thier-Reich" of 1768, where an additional posterior horn was added to a drawing of the Dutch Rhinoceros seen in Augsburg by Johann Elias Ridinger. **12.** G. T. Wilhelm described three species of rhinoceros in the second edition of his "Unterhaltungen aus der Naturgeschichte" of 1808. Plate XLVIII depicted the one-horned rhinoceros after an engraving by Johann Elias Ridinger, and the double-horned rhinoceros after Sparrman (see Fig. 5). **13.** The third species of rhinoceros described by G. T. Wilhelm in 1808 was the Sumatran species. The upper figure of Plate XLIX was based on the original of William Bell (see Fig. 1). The lower figure is a horned or tusked animal called Sukotyro.

taxonomists, even if their annoyance is rarely put in print. Such names are just a nuisance, adding unnecessarily to lists of synonyms, and they add nothing to the progress of science. However true that might be, they are definitely part of our collective history and should figure in studies of how we have arrived at our current understanding and consensus of animal classification. Stability is rarely threatened because the current International Code of Zoological Nomenclature (1999), as well as most of its predecessors provide enough handles to deal with the names in a dignified manner without judging the authors who proposed them in the first place nor the bibliographers who come across them. Any name proposed between 1758 and 1899 but unused since 1899 is now termed a *nomen oblitum* (forgotten name). Even if such a name is older than the one currently in general use, there is no need to change the nomenclature of that particular taxon.

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